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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/694,727

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Hideo Kitami

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SUGHRUE MION, PLLC  
2100 PENNSYLVANIA AVENUE, N.W.  
SUITE 800  
WASHINGTON, DC 20037

EXAMINER

AJIBADE AKONAI, OLUMIDE

ART UNIT

PAPER NUMBER

2617

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/694,727	<b>Applicant(s)</b> KITAMI ET AL.	
	<b>Examiner</b> OLUMIDE T. AJIBADE AKONAI	<b>Art Unit</b> 2617	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) ☒ Responsive to communication(s) filed on 12 February 2008.

2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) ☒ Claim(s) 1-23 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) ☒ Claim(s) 18 and 23 is/are allowed.

6) ☒ Claim(s) 1,3-5,7,9-11,13,15-17 and 19-22 is/are rejected.

7) ☒ Claim(s) 2,6,8,12 and 14 is/are objected to.

8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☒ All    b) ☐ Some \*    c) ☐ None of:

1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments, see pages 2-3 of the remarks, filed February 12 2008, with respect to the rejection(s) of claim(s) 1, 5, 7, 11, 13, 19, 20, 21, and 22 under 35 U.S.C. § 102(e) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Ishibashi et al 20030115359 and **Fantaske 6,922,557**.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claim 1, 3-5, 7, 9-11, 13, 15-17, and 19-22 rejected under 35 U.S.C. 103(a) as being unpatentable over **Ishibashi et al 20030115359 (hereinafter Ishibashi)** in view of **Fantaske 6,922,557**.

Regarding **claims 1 and 19**, Ishibashi discloses, a method in a wireless LAN terminal (PC 30, see fig. 1, p.2, [0029]) comprising: a reception means for receiving a wireless LAN signal (digital/analog signal, see fig. 1, p.2, [0029]) from another wireless LAN terminal (WLAN section 31, see fig. 2, p.2, [0035]); an encapsulation means (see fig. 2, p.2, [0035]) for encapsulating the wireless LAN signal in OSI layer 2 (WLAN section 31 of PC 30, indicating the MAC layer/OSI layer 2, see fig. 2, p.2, [0035]) by providing the wireless LAN signal with a header (Ethernet header, see fig. 3, p.2-3, [0035]-[0036]) having its own terminal's MAC address as an originating MAC address (MAC address "A", see fig. 3, p.3, [0037]) and a LAN station's MAC address as a destination MAC address (MAC address "B", see fig. 3, p.3, [0037]).

Ishibashi does not specifically disclose the destination MAC address being a MAC address of a wireless LAN base station; and transmitting the encapsulated wireless LAN signal to the wireless LAN base station.

Fantaske, however, discloses a wireless terminal 204 (see fig. 2, col. 7, line 65) having an encapsulation means for encapsulating a wireless LAN signal

(802.11 protocol area 234, see fig. 2, col. 8, lines 35-43, col. 14, lines 9-11), wherein the destination MAC address is a MAC address of a wireless LAN base station (802.11 protocol layer encapsulates link layer frames with the destination MAC address being the MAC address of the access point 210, see col. 14, lines 4-16); and transmitting the encapsulated wireless LAN signal to the wireless LAN base station (see col. 14, lines 4-17).

It would therefore have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Fantaske, by having a mobile device encapsulate a datagram to be transmitted to an access point, the encapsulated datagram containing a header including a MAC address of the access point as the destination address, into the system of Ishibashi for the benefit of transmitting wireless messages between a wireless network and a land-based network.

Regarding **claim 4**, as applied to claim 1, Ishibashi further discloses a channel setup means for setting a wireless channel of the reception means (see fig. 1, p.2, [0029]).

Regarding **claim 5**, Ishibashi discloses a wireless LAN base station (access point 20, see fig. 2, p.2, [0033]) comprising: an encapsulation means (see fig. 2, p.2, [0035]) for encapsulating a wireless LAN signal destined for a first wireless LAN terminal in OSI layer 2 by providing the wireless LAN signal with a header having a station's MAC address as an originating MAC address (MAC address "A", see fig. 3, p.3, [0037]) and a second LAN terminal's MAC address as a destination MAC address (MAC address "B", see fig. 3, p.3, [0037]); and a transmission means for transmitting the encapsulated

wireless LAN signal to the second LAN terminal (IP router section 22 for routing messages to another access point 20 at a shop side, see p.2, [0033], p.3, [0041]).

Ishibashi does not specifically disclose a header having its own base station's MAC address as an originating address and a second wireless LAN terminal's MAC address as a destination MAC address being a MAC address of a wireless LAN base station; and a transmission means for transmitting the encapsulated wireless LAN signal to the second wireless LAN terminal.

Fantaske, however, discloses a wireless terminal 204 (see fig. 2, col. 7, line 65) having an encapsulation means for encapsulating a wireless LAN signal (802.11 protocol area 234, see fig. 2, col. 8, lines 35-43, col. 14, lines 9-11), wherein the destination MAC address is a MAC address of a wireless LAN base station (802.11 protocol layer encapsulates link layer frames with the destination MAC address being the MAC address of the access point 210, see col. 14, lines 4-16); and transmitting the encapsulated wireless LAN signal to the wireless LAN base station (see col. 14, lines 4-17).

It would therefore have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Fantaske, by having a mobile device encapsulate a datagram to be transmitted to an access point, the encapsulated datagram containing a header including a MAC address of the access point as the destination address, into the system of Ishibashi for the benefit of transmitting wireless messages between a wireless network and a land-based network.

Regarding **claims 7 and 21**, Ishibashi discloses a wireless LAN terminal (access point 20, see fig. 2, p.2, [0033]) comprising: a reception means (wireless LAN section 24, see fig. 2, p.2, [0033]) for receiving a wireless LAN signal (digital/analog signal, see fig. 1, p.2, [0029]) which is destined for another wireless LAN terminal (access point 20 on shop side A or B, see fig. 1, p.2, [0029], [0033]) and is encapsulated in OSI layer 2 (WLAN section 31 of PC 30, indicating the MAC layer/OSI layer 2, see fig. 2, p.2, [0035]) by being provided with a header having a LAN station's MAC address as an originating MAC address (MAC address "A", see fig. 3, p.3, [0037]) and a terminal's MAC address as a destination address (MAC address "B", see fig. 3, p.3, [0037]); an extraction means for extracting the wireless LAN signal from the encapsulated wireless LAN signal (bridge section 23, see fig. 2, p.3, [0039]); and a transmission means for transmitting the extracted wireless LAN signal to said another wireless LAN terminal (IP router section 22 for routing messages to another access point 20 at a shop side, see p.2, [0033], p.3, [0041]).

Ishibashi does not specifically disclose a header having its own base station's MAC address as an originating address and a second wireless LAN terminal's MAC address as a destination MAC address being a MAC address for another wireless LAN base station; and a transmission means for transmitting the encapsulated wireless LAN signal to said another wireless LAN terminal.

Fantaske, however, discloses a wireless terminal 204 (see fig. 2, col. 7, line 65) having an encapsulation means for encapsulating a wireless LAN signal (802.11 protocol area 234, see fig. 2, col. 8, lines 35-43, col. 14, lines 9-11), wherein the

destination MAC address is a MAC address of a wireless LAN base station (802.11 protocol layer encapsulates link layer frames with the destination MAC address being the MAC address of the access point 210, see col. 14, lines 4-16); and transmitting the encapsulated wireless LAN signal to the wireless LAN base station (see col. 14, lines 4-17).

It would therefore have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Fantaske, by having a mobile device encapsulate a datagram to be transmitted to an access point, the encapsulated datagram containing a header including a MAC address of the access point as the destination address, into the system of Ishibashi for the benefit of transmitting wireless messages between a wireless network and a land-based network.

Regarding **claims 11, 20, and 22**, Ishibashi discloses a wireless LAN terminal (access point 20, see fig. 2, p.2, [0033]) comprising: a reception means (wireless LAN section 24, see fig. 2, p.2, [0033]) for receiving a wireless LAN signal (digital/analog signal, see fig. 1, p.2, [0029]) which is transmitted from a first wireless LAN terminal (PC 30, see fig. 1, p.2, [0029]) and is encapsulated in OSI layer 2 (WLAN section 31 of PC 30, indicating the MAC layer/OSI layer 2, see fig. 2, p.2, [0035]) by being provided with a header having a second LAN terminal's MAC address as an originating MAC address (MAC address "A", see fig. 3, p.3, [0037]) and a LAN station's MAC address as a destination address (MAC address "B", see fig. 3, p.3, [0037]); and an extraction means for extracting the wireless LAN signal from the encapsulated wireless LAN signal (bridge section 23, see fig. 2, p.3, [0039]).



Ishibashi does not specifically disclose a header having it's a second wireless LAN terminals MAC address as an originating address and own base stations MAC address as a destination MAC address.

Fantaske, however, discloses a wireless terminal 204 (see fig. 2, col. 7, line 65) having an encapsulation means for encapsulating a wireless LAN signal (802.11 protocol area 234, see fig. 2, col. 8, lines 35-43, col. 14, lines 9-11), wherein the destination MAC address is a MAC address of a wireless LAN base station (802.11 protocol layer encapsulates link layer frames with the destination MAC address being the MAC address of the access point 210, see col. 14, lines 4-16); and transmitting the encapsulated wireless LAN signal to the wireless LAN base station (see col. 14, lines 4-17).

It would therefore have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Fantaske, by having a mobile device encapsulate a datagram to be transmitted to an access point, the encapsulated datagram containing a header including a MAC address of the access point as the destination address, into the system of Ishibashi for the benefit of transmitting wireless messages between a wireless network and a land-based network.

Regarding **claim 13**, Ishibashi discloses a wireless LAN terminal (access point 20, see fig. 2, p.2, [0033]) comprising: a first reception means (wireless LAN section 24, see fig. 2, p.2, [0033]) for receiving a wireless LAN signal (digital/analog signal, see fig. 1, p.2, [0029]) from another wireless LAN terminal (PC 30, see fig. 1, p.2, [0029]); an encapsulation means (see fig. 2, p.2, [0035]) for encapsulating the wireless LAN signal

in OSI layer 2 (WLAN section 31 of PC 30, indicating the MAC layer/OSI layer 2, see fig. 2, p.2, [0035]) by providing the wireless LAN signal with a header having its a terminal's MAC address as an originating MAC address (MAC address "A", see fig. 3, p.3, [0037]) and a LAN station's MAC address as a destination MAC address (MAC address "B", see fig. 3, p.3, [0037]); a first transmission means for transmitting the encapsulated wireless LAN signal to the wireless LAN base station (IP router section 22 for routing messages to another access point 20 at a shop side, see p.2, [0033], p.3, [0041]); a second reception means (wireless LAN section 24, see fig. 2, p.2, [0033]) for receiving a wireless LAN signal which is destined for said another wireless LAN terminal and is encapsulated in OSI layer 2 by being provided with a header having the wireless LAN base station's MAC address as an originating MAC address and a terminal's MAC address as a destination address (MAC address "A" and "B", see fig. 3, p.3, [0037]); an extraction means for extracting the wireless LAN signal from the encapsulated wireless LAN signal received by the second reception means (bridge section 23, see fig. 2, p.3, [0039]); and a second transmission (IP router section 22, see p.2, [0033], p.3, [0041]) means for transmitting the extracted wireless LAN signal to said another wireless LAN terminal (IP router section 22 for routing messages to another access point 20 at a shop side, see p.2, [0033], p.3, [0041]).

Ishibashi does not specifically disclose a header having its own base station's MAC address as an originating address and a wireless LAN terminal's MAC address as a destination MAC address being a MAC address for another wireless LAN

base station; and a transmission means for transmitting the encapsulated wireless LAN signal to said another wireless LAN terminal.

Fantaske, however, discloses a wireless terminal 204 (see fig. 2, col. 7, line 65) having an encapsulation means for encapsulating a wireless LAN signal (802.11 protocol area 234, see fig. 2, col. 8, lines 35-43, col. 14, lines 9-11), wherein the destination MAC address is a MAC address of a wireless LAN base station (802.11 protocol layer encapsulates link layer frames with the destination MAC address being the MAC address of the access point 210, see col. 14, lines 4-16); and transmitting the encapsulated wireless LAN signal to the wireless LAN base station (see col. 14, lines 4-17).

It would therefore have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Fantaske, by having a mobile device encapsulate a datagram to be transmitted to an access point, the encapsulated datagram containing a header including a MAC address of the access point as the destination address, into the system of Ishibashi for the benefit of transmitting wireless messages between a wireless network and a land-based network.

Regarding **claims 10 and 17**, as applied to claims 7 and 13, Ishibashi further discloses a channel setup means for setting a wireless channel of the reception means (see fig. 1, p.2, [0029]).

Regarding **claims 3, 9, and 16**, as applied to claims 1, 7, and 13, Ishibashi further discloses a start/stop means for starting or stopping the reception means based on a request from said another wireless terminal and a state of

communication with said another wireless terminal (see figs. 1 and 2, p.2, [0029]-[0030], p.3, [0042][0045]).

Regarding **claim 15**, Ishibashi discloses wherein the first reception means and the second reception means operate in a time sharing manner using a common wireless LAN module (see figs. 1 and 2, p.2, [0029]-[0030], p.3, [0042][0045]); and wherein the first transmission means and the second transmission means operate in a time sharing manner using a common wireless LAN module (see figs. 1 and 2, p.2, [0029]-[0030], p.3, [0042][0045]).

#### ***Allowable Subject Matter***

4. Claims 2, 6, 8, 12, and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 18 and 23 are allowed.

#### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to OLUMIDE T. AJIBADE AKONAI whose telephone number is (571)272-6496. The examiner can normally be reached on M-F, 8.30p-5p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on 571-272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

OA

/Charles N. Appiah/

Supervisory Patent Examiner, Art Unit 2617

